Amendment to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1.   (currently amended)   A method of transmitting data within a network including one or more of a first type of device operating according to a first protocol and a second protocol and one or more of a second type of device operating according to only the second protocol, wherein devices of the first type and devices of the second type communicate with each other within the network, comprising:

      a.   establishing a periodic cycle including a first portion and a second portion;

      b.   allowing only transmissions according to the first protocol during the first portion; and

      c.   allowing only transmissions according to the second protocol during the second portion,

wherein the first protocol has priority over the second protocol, and further wherein the second protocol is prioritized between a first set of traffic and a second set of traffic, wherein the first type of device operates according to IEEE 1394 protocol and the second type of device operates according to ethernet protocol.

2.   (canceled)

3.   (previously presented)   The method as claimed in claim 1 further comprising converting the transmissions into a format understood by a receiving device.

4.   (original)   The method as claimed in claim 1 wherein a duration of the first portion is dependent on a number of active streams of the first protocol within the network.

5.   (original)   The method as claimed in claim 1 further comprising establishing an active stream of the first protocol within the network and guaranteeing first protocol bandwidth to the active stream.

6.   (canceled)

7.   (original)   The method as claimed in claim 1 wherein the first protocol is isochronous capable and the second protocol is asynchronous.

8.   (currently amended)   A modified hub device configured for coupling between two or more devices operating according to two or more different protocols and a switching device, wherein devices of the first type and devices of the second type communicate with each other, the hub device comprising:

      a.   a first interface configured for coupling to and communicating with one or more of a first type of device operating according to a first protocol and a second protocol;

      b.   a second interface configured for coupling to and communicating with one or more of a second type of device operating according to only the second protocol; and

      c.   a third interface configured for coupling to and communicating with the switching device, wherein the switching device sends a periodic signal which signals the start of a period having a first portion and a second portion, wherein only communications in the first protocol are allowed during the first portion and only communications in the second protocol are allowed during the second portion, and further wherein the second protocol is prioritized between a first set of traffic and a second set of traffic;
wherein the first type of device operates according IEEE 1394 protocol and the second type of device operates according to ethernet protocol.

9.   (canceled)

10.   (original)   The modified hub device as claimed in claim 8 further comprising a conversion circuit coupled to the first interface, the second interface and the third interface for converting transmissions into a format understood by a receiving device.

11.   (original)   The modified hub device as claimed in claim 8 wherein a duration of the first portion is dependent on a number of active streams of the first protocol.

12. (original) The modified hub device as claimed in claim 8 wherein the modified hub device communicates with the switching device to establish an active stream involving a device of the first type coupled to the hub device and further wherein appropriate bandwidth for the active stream is guaranteed when the active stream is established.

13. (original) The modified hub device as claimed in claim 8 wherein the modified hub device communicates with the switching device to establish an active stream involving a device of the first type coupled to the hub device and to assign a label corresponding to the active stream.

14. (canceled)

15. (original) The modified hub device as claimed in claim 8 wherein the first protocol is isochronous and the second protocol is asynchronous.

16. (original) The modified hub device as claimed in claim 8 wherein communications from the first type of device in the second protocol are prioritized during the second portion over communications from the second type of device in the second protocol.

17. (original) The modified hub device as claimed in claim 8 wherein communications from the second type of device in the second protocol are prioritized during the second portion over communications from the first type of device in the second protocol.

18. (original) The modified hub device as claimed in claim 8 wherein the switching device is configured for coupling to a remote network of devices thereby providing a wide area network.

19. (currently amended) A switching device configured for coupling to two or more hub devices providing interfaces to one or more of a first type of device operating according to a first protocol and a second protocol and one or more of a second type of device operating according to only the second protocol, the switching device comprising:
   a. a plurality of ports, each port coupled to a corresponding hub device for interfacing with devices coupled to the corresponding hub device; and

b.   a control circuit coupled to the plurality of ports for sending a periodic signal
which signals the start of a period having a first portion and a second portion,
wherein only communications in the first protocol are allowed during the first
portion and only communications in the second protocol are allowed during the
second portion,

wherein the first protocol has priority over the second protocol, and further wherein the second
protocol is prioritized between a first set of traffic and a second set of traffic, wherein the first
type of device operates according to IEEE 1394 protocol and the second type of device operates
according to ethernet protocol.

20.   (original)   The switching device as claimed in claim 19 wherein devices of the first
type and devices of the second type communicate with each other.

21.   (original)   The switching device as claimed in claim 19 wherein a duration of the first
portion is dependent on a number of active streams of the first protocol.

22.   (original)   The switching device as claimed in claim 19 wherein the switching device
communicates with the hub devices to establish an active stream involving a device of the first
type and further wherein appropriate bandwidth for the active stream is guaranteed when the
active stream is established.

23.   (original)   The switching device as claimed in claim 19 wherein the switching device
communicates with the hub devices to establish an active stream involving a device of the first
type and to assign a label corresponding to the active stream.

24.   (canceled)

25.   (original)   The switching device as claimed in claim 19 wherein the first protocol is
isochronous capable and the second protocol is asynchronous.

26.   (original)   The switching device as claimed in claim 19 wherein communications
from the first type of device in the second protocol are prioritized during the second portion over
communications from the second type of device in the second protocol.

27.   (original)   The switching device as claimed in claim 19 wherein communications from the second type of device in the second protocol are prioritized during the second portion over communications from the first type of device in the second protocol.

28.   (original)   The switching device as claimed in claim 19 further comprising a remote interface circuit configured for coupling to a remote network of devices thereby providing a wide area network.

29.   (currently amended)   A network of devices comprising:
     a.   a switching device including:
          i.   a plurality of ports; and
          ii.   a control circuit coupled to the plurality of ports for sending a periodic signal which signals the start of a period having a first portion and a second portion, wherein only communications in a first protocol are allowed during the first portion and only communications in a second protocol are allowed during the second portion; and
     b.   a plurality of modified hub devices each including:
          i.   a first interface configured for coupling to and communicating with one or more of a first type of device operating according to the first protocol and the second protocol;
          ii.   a second interface configured for coupling to and communicating with one or more of a second type of device operating according to only the second protocol, wherein the first protocol has priority over the second protocol; and
          iii.   a third interface coupled to a corresponding one of the plurality of ports, and wherein the second protocol is prioritized between a first set of traffic and a second set of traffic;
          <u>wherein the first type of device operates according to IEEE 1394 protocol and the second type of device operates according to ethernet protocol.</u>

30.   (original)   The network of devices as claimed in claim 29 wherein devices of the first type and devices of the second type communicate with each other.

31.   (original)   The network of devices as claimed in claim 30 wherein each of the modified hub devices further comprise a conversion circuit coupled to the first interface, the second interface and the third interface for converting transmissions into a format understood by a receiving device.

32.   (original)   The network of devices as claimed in claim 29 wherein a duration of the first portion is dependent on a number of active streams of the first protocol.

33.   (original)   The network of devices as claimed in claim 29 wherein each of the modified hub devices communicate with the switching device to establish an active stream involving a device of the first type coupled to the hub device and further wherein appropriate bandwidth for the active stream is guaranteed when the active stream is established.

34.   (original)   The network of devices as claimed in claim 29 wherein each of the modified hub devices communicate with the switching device to establish an active stream involving a device of the first type coupled to the hub device and to assign a label corresponding to the active stream.

35.   (canceled)

36.   (original)   The network of devices as claimed in claim 29 wherein the first protocol is isochronous capable and the second protocol is asynchronous.

37.   (original)   The network of devices as claimed in claim 29 wherein communications from the first type of device in the second protocol are prioritized during the second portion over communications from the second type of device in the second protocol.

38.   (original)   The network of devices as claimed in claim 29 wherein communications from the second type of device in the second protocol are prioritized during the second portion over communications from the first type of device in the second protocol.

39.   (original)   The network of devices as claimed in claim 29 wherein the switching device further comprises a remote interface circuit configured for coupling to a remote network of devices thereby providing a wide area network.

40.   (currently amended)   A method of transmitting data within a network including one or more of a first type of device operating according to an isochronous protocol and an asynchronous protocol and one or more of a second type of device operating according to only the asynchronous protocol, wherein devices of the first type and devices of the second type communicate with each other within the network, comprising:

    a.   establishing a periodic cycle including a first portion and a second portion;

    b.   allowing only transmissions according to the isochronous protocol during the first portion; and

    c.   allowing only transmissions according to the asynchronous protocol during the second portion,

wherein the isochronous protocol has priority over the asynchronous protocol, and further wherein the asynchronous protocol is prioritized between a first set of traffic and a second set of traffic, wherein the first type of device operates according to IEEE 1394 protocol and the second type of device operates according to ethernet protocol.

41.   (canceled)

42.   (currently amended)   A network of devices comprising:

    a.   a switching device including:

        i.   a plurality of ports; and

        ii.   a control circuit coupled to the plurality of ports for sending a periodic signal which signals the start of a period having a first portion and a second portion, wherein only communications in an isochronous protocol are allowed during the first portion and only communications in an asynchronous protocol are allowed during the second portion; and

b.   a plurality of modified hub devices each including:

        i.   a first interface configured for coupling to and communicating with one or more of a first type of device operating according to the isochronous protocol and the asynchronous protocol;

        ii.   a second interface configured for coupling to and communicating with one or more of a second type of device operating according to only the asynchronous protocol, wherein the isochronous protocol has priority over the asynchronous protocol; and

        iii.   a third interface coupled to a corresponding one of the plurality of ports, and further wherein the asynchronous protocol is prioritized between a first set of traffic and a second set of traffic;

wherein the first type of device operates according to IEEE 1394 protocol and the second type of device operates according to ethernet protocol.

43.   (canceled)

44.   (previously presented)   A method of transmitting data within a network including one or more of a first type of device operating according to an isochronous protocol and an asynchronous protocol and one or more of a second type of device operating according to only the asynchronous protocol, wherein devices of the first type and devices of the second type communicate with each other within the network, comprising:

    a.   establishing a periodic cycle including a first portion and a second portion;

    b.   allowing only transmissions according to the isochronous protocol during the first portion; and

    c.   allowing only transmissions according to the asynchronous protocol during the second portion,

wherein the isochronous protocol has priority over the asynchronous protocol, and further wherein the asynchronous protocol is prioritized between IEEE 1394-2000 asynchronous traffic and ethernet traffic.

45.   (canceled)